

DATA FORMS

ROUTINE WETLAND DETERMINATION
(1987 COE Wetland Delineation Manual)

EXHIBIT

"B"

PART 2

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Homer (HHW) Facility, Guarico Ward</u>	Date: <u>06/23/2006</u>
Applicant/Owner: <u>Federal Aviation Administration</u>	County: <u>Vega Baja</u>
Investigator: <u>Rivera Lugo.P.J.</u>	State: <u>PR</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Community ID: <u>Herbaceous</u>
Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Transect ID: <u>I</u>
Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	Plot ID: <u>a</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Blechnum serrulatum</u>	<u>H</u>	<u>Obl</u>	9. _____	_____	_____
2. <u>Cladium jamaicensis</u>	<u>H</u>	<u>Obl</u>	10. _____	_____	_____
3. <u>Myrica cerifera</u>	<u>T</u>	<u>FACW</u>	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC
(excluding FAC-). 100%

Remarks:

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input checked="" type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>14</u> (in.) Depth to Free Water in Pit: <u>12</u> (in.) Depth to Saturated Soil: <u>10</u> (in.)	
Remarks:	

SOILS

Map Unit Name (Series and Phase):		<u>Algarrobo fine sand</u>		Drainage Class:	<u>Very good (>20in/hr)</u>
Taxonomy (Subgroup):		<u>Isohyperthermic Entic Haplohumods</u>		Field Observations Confirm Mapped Type?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Profile Descriptions: Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc,
0-8	A1	10YR 2/1			Fine sand/muck
8-18	A2	10YR7/4			Fine Sand

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input checked="" type="checkbox"/> Aquic Moisture Regime <input checked="" type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input checked="" type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)
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Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Check) Wetland Hydrology Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Hydric Soils Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(Check) Is this Sampling Point Within a Wetland? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Remarks	

DATA FORM
ROUTINE WETLAND DETERMINATION
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Project/Site: <u>Homer (HHW) Facility, Guarico Ward</u> Applicant/Owner: <u>Federal Aviation Administration</u> Investigator: <u>Rivera Lugo.P.J.</u>	Date: <u>06/23/2006</u> County: <u>Vega Baja</u> State: <u>PR</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	Community ID: <u>Herbaceous</u> Transect ID: <u>I</u> Plot ID: <u>b</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Chrysobalanus icaco</u>	<u>S</u>	<u>FAC</u>	9. _____	_____	_____
2. <u>Randia aculeata</u>	<u>S</u>	<u>FAC</u>	10. _____	_____	_____
3. <u>Ouratea litoralis</u>	<u>S</u>	<u>NI</u>	11. _____	_____	_____
4. <u>Schefflera morototonii</u>	<u>T</u>	<u>FAC</u>	12. _____	_____	_____
5. <u>Capparis flexuosa</u>	<u>T</u>	<u>UPL</u>	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). % _____

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input checked="" type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>NA</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>NA</u> (in.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase):		Algarrobo fine sand		Drainage Class:	Good (6--20in/hr)
				Field Observations	
Taxonomy (Subgroup):		Isohyperthermic Entic Haplohumods		Confirm Mapped Type?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Profile Descriptions:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc,
0-2	A1	10YR 2/2			Fine sand
2-18	A2	10YR 3/2			Fine Sand

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input checked="" type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)
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Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Check) Wetland Hydrology Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Hydric Soils Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<div style="text-align: right;">(Check)</div> Is this Sampling Point Within a Wetland? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Homer (HHW) Facility, Guarico Ward</u>	Date: <u>06/23/2006</u>
Applicant/Owner: <u>Federal Aviation Administration</u>	County: <u>Vega Baja</u>
Investigator: <u>Rivera Lugo, P.J.</u>	State: <u>PR</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Community ID: <u>Herbaceous</u>
Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Transect ID: <u>II</u>
Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Plot ID: <u>a</u>
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Andira inermis</u>	<u>T</u>	<u>FACW</u>	9. _____	_____	_____
2. <u>Chrysobalanus icaco</u>	<u>S</u>	<u>FAC</u>	10. _____	_____	_____
3. <u>Clusia rosea</u>	<u>T</u>	<u>FAC</u>	11. _____	_____	_____
4. <u>Clitoria laurifolia</u>	<u>H</u>	<u>FACW</u>	12. _____	_____	_____
5. <u>Cyperus ligularis</u>	<u>H</u>	<u>FAC</u>	13. _____	_____	_____
6. <u>Ipomea violacea</u>	<u>H</u>	<u>FAC</u>	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC
(excluding FAC-). % _____

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input checked="" type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>NA</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>NA</u> (in.)	
Remarks:	

SOILS

Map Unit Name (Series and Phase):		Algarrobo fine sand		Drainage Class:	Good (6–20in/hr)
Taxonomy (Subgroup):		Isohyperthermic Entic Haplohumods		Field Observations Confirm Mapped Type?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Profile Descriptions: Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-3	A1	10YR 8/1			Fine White sand
3-18	A2	10YR 3/2			Fine White Sand

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)
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Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Check) Wetland Hydrology Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Hydric Soils Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<div style="text-align: right;">(Check)</div> Is this Sampling Point Within a Wetland? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks	

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Project/Site: <u>Homer (HHW) Facility, Guarico Ward</u>	Date: <u>06/23/2006</u>
Applicant/Owner: <u>Federal Aviation Administration</u>	County: <u>Vega Baja</u>
Investigator: <u>Rivera Lugo, P.J.</u>	State: <u>PR</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Community ID: <u>Herbaceous</u>
Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Transect ID: <u>II</u>
Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Plot ID: <u>b</u>
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Blechnum serrulatum</u>	<u>H</u>	<u>OBL</u>	9. _____	_____	_____
2. <u>Miconia racemosa</u>	<u>S</u>	<u>FACW</u>	10. _____	_____	_____
3. <u>Cladium jamaicensis</u>	<u>H</u>	<u>OBL</u>	11. _____	_____	_____
4. <u>Paspalum millegrana</u>	<u>H</u>	<u>FACW</u>	12. _____	_____	_____
5. <u>Nepsera aquatica</u>	<u>H</u>	<u>FACW</u>	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input checked="" type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>14</u> (in.) Depth to Free Water in Pit: <u>12</u> (in.) Depth to Saturated Soil: <u>10</u> (in.)	
Remarks:	

SOILS

Map Unit Name (Series and Phase):		Algarrobo fine sand		Drainage Class:	Good (6–20in/hr)
				Field Observations	High water table
Taxonomy (Subgroup):		Isohyperthermic Entic Haplohumods		Confirm Mapped Type?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Profile Descriptions: Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-12	A1	10YR 4/1			Fine Sand
12-18	A2	10YR 6/2			Fine Sand

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input checked="" type="checkbox"/> Sulfidic Odor <input checked="" type="checkbox"/> Aquic Moisture Regime <input checked="" type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input checked="" type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)
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Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Check) Wetland Hydrology Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Hydric Soils Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<div style="text-align: right;">(Check)</div> Is this Sampling Point Within a Wetland? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Remarks	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Homer (HHW) Facility, Guarico Ward</u> Applicant/Owner: <u>Federal Aviation Administration</u> Investigator: <u>Rivera Lugo, P.J.</u>	Date: <u>06/23/2006</u> County: <u>Vega Baja</u> State: <u>PR</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If needed, explain on reverse.)	Community ID: <u>Herbaceous</u> Transect ID: <u>II</u> Plot ID: <u>c</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Blechnum serrulatum</u>	<u>H</u>	<u>OBL</u>	9. _____	_____	_____
2. <u>Myrica cerifera</u>	<u>T</u>	<u>FACW</u>	10. _____	_____	_____
3. <u>Cladium jamaicensis</u>	<u>H</u>	<u>OBL</u>	11. _____	_____	_____
4. <u>Paspalum millegrana</u>	<u>H</u>	<u>FACW</u>	12. _____	_____	_____
5. <u>Fimbristylis dichotoma</u>	<u>H</u>	<u>FACW</u>	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input checked="" type="checkbox"/> Water-Stained Leaves <input checked="" type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>16</u> (in.) Depth to Free Water in Pit: <u>14</u> (in.) Depth to Saturated Soil: <u>12</u> (in.)	
Remarks:	

SOILS

Map Unit Name (Series and Phase): <u>Corozo fine sand & Tiburones Muck intrusions</u>		Drainage Class: <u>Good (6--20in/hr)</u> Field Observations <u>High water table</u> Confirm Mapped Type? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Taxonomy (Subgroup): <u>Isohyperthermic OrthoxicTropdults</u>			

Profile Descriptions:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-10	A1	10YR 3/1			Fine Sand/Muck
10-16	A2	10YR 7-6/2			Fine Sand
16-20	A3	10YR 3/1			Sandy mucky

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input checked="" type="checkbox"/> Sulfidic Odor <input checked="" type="checkbox"/> Aquic Moisture Regime <input checked="" type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input checked="" type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input checked="" type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)
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Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Check) Wetland Hydrology Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Hydric Soils Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Check) Is this Sampling Point Within a Wetland? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Remarks	

Approved by HQUSACE 3/92

Forms version 1/02

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Project/Site: <u>Homer (HHW) Facility, Guarico Ward</u>	Date: <u>06/23/2006</u>
Applicant/Owner: <u>Federal Aviation Administration</u>	County: <u>Vega Baja</u>
Investigator: <u>Rivera Lugo, P.J.</u>	State: <u>PR</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Community ID: <u>Herbaceous</u>
Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Transect ID: <u>III</u>
Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Plot ID: <u>a</u>
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Blechnum serrulatum</u>	<u>H</u>	<u>OBL</u>	9. _____	_____	_____
2. <u>Paspalum millegrana</u>	<u>H</u>	<u>FACW</u>	10. _____	_____	_____
3. <u>Cladium jamaicensis</u>	<u>H</u>	<u>OBL</u>	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks:

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input checked="" type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>18</u> (in.) Depth to Free Water in Pit: <u>16</u> (in.) Depth to Saturated Soil: <u>12</u> (in.)	
Remarks:	

SOILS

Map Unit Name (Series and Phase): <u>Corozo fine sand □ & Tiburones Muck intrusions</u>		Drainage Class: <u>Good (6–20in/hr)</u> Field Observations <u>High water table</u> Confirm Mapped Type? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Taxonomy (Subgroup): <u>Isohyperthermic OrthoxicTropdults</u>			

Profile Descriptions:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-12	A1	10YR 3/2			Fine Sand
12-18	A2	10YR 5/1		Few Small	Fine Sand

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input checked="" type="checkbox"/> Sulfidic Odor <input checked="" type="checkbox"/> Aquic Moisture Regime <input checked="" type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input checked="" type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input checked="" type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)
--	--

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Check) Wetland Hydrology Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Hydric Soils Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(Check) Is this Sampling Point Within a Wetland? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Remarks	

Approved by HQUSACE 3/92

Forms version 1/02

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Homer (HHW) Facility, Guarico Ward</u>	Date: <u>06/23/2006</u>
Applicant/Owner: <u>Federal Aviation Administration</u>	County: <u>Vega Baja</u>
Investigator: <u>Rivera Lugo.P.J.</u>	State: <u>PR</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Community ID: <u>Herbaceous</u>
Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Transect ID: <u>III</u>
Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Plot ID: <u>b</u>
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Chrysobalanus icaco</u>	<u>S</u>	<u>FAC</u>	9. _____	_____	_____
2. <u>Randia aculeata</u>	<u>S</u>	<u>FAC</u>	10. _____	_____	_____
3. <u>Conyza canadensis</u>	<u>S</u>	<u>FACU</u>	11. _____	_____	_____
4. <u>Urena lobata</u>	<u>S</u>	<u>FAC</u>	12. _____	_____	_____
5. <u>Citharexylum fruticosum</u>	<u>T</u>	<u>NI</u>	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). % _____

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>NA</u> (in.) Depth to Free Water in Pit: <u>NA</u> (in.) Depth to Saturated Soil: <u>NA</u> (in.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase):		Algarrobo fine sand		Drainage Class:	Good (6–20in/hr)
				Field Observations	
Taxonomy (Subgroup):		Isohyperthermic Entic Haplohumods		Confirm Mapped Type?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Profile Descriptions:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc,
0–12	A1	10YR 3/1			Fine sand
12–18	A2	10YR 3/2			Fine Sand/Clayish

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input checked="" type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input checked="" type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)
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Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Check) Wetland Hydrology Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Hydric Soils Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<div style="text-align: right;">(Check)</div> Is this Sampling Point Within a Wetland? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Remarks	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Homer (HHW) Facility, Guarico Ward</u>	Date: <u>06/23/2006</u>
Applicant/Owner: <u>Federal Aviation Administration</u>	County: <u>Vega Baja</u>
Investigator: <u>Rivera Lugo.P.J.</u>	State: <u>PR</u>
Do Normal Circumstances exist on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Community ID: <u>Herbaceous</u>
Is the site significantly disturbed (Atypical Situation)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Transect ID: <u>III</u>
Is the area a potential Problem Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Plot ID: <u>c</u>
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Blechnum serrulatum</u>	<u>H</u>	<u>OBL</u>	9. _____	_____	_____
2. <u>Myrica cerifera</u>	<u>T</u>	<u>FACW</u>	10. _____	_____	_____
3. <u>Cladium jamaicensis</u>	<u>H</u>	<u>OBL</u>	11. _____	_____	_____
4. <u>Paspalum millegrana</u>	<u>H</u>	<u>FACW</u>	12. _____	_____	_____
5. <u>Ouratea litoralis</u>	<u>S</u>	<u>NI</u>	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: _____

HYDROLOGY

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input type="checkbox"/> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators (2 or more required): <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12 Inches <input checked="" type="checkbox"/> Water-Stained Leaves <input checked="" type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>18</u> (in.) Depth to Free Water in Pit: <u>16</u> (in.) Depth to Saturated Soil: <u>12</u> (in.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase):		<u>Corozo fine sand & Tiburones Muck intrusions</u>		Drainage Class:	<u>Good (6--20in/hr)</u>
Taxonomy (Subgroup):		<u>Isohyperthermic Orthoxic Tropdults</u>		Field Observations	<u>High water table</u>
				Confirm Mapped Type?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Profile Descriptions:		Matrix Color	Mottle Colors	Mottle Abundance/	Texture, Concretions,
Depth (inches)	Horizon	(Munsell Moist)	(Munsell Moist)	Size/Contrast	Structure, etc,
0-12	A1	10YR 2/1-2			Fine Sand/Muck
12-18	A2	10YR 6/1-2			Fine Sand

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input checked="" type="checkbox"/> Aquic Moisture Regime <input checked="" type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input checked="" type="checkbox"/> High Organic Content in Surface Layer in Sandy Soils <input checked="" type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)
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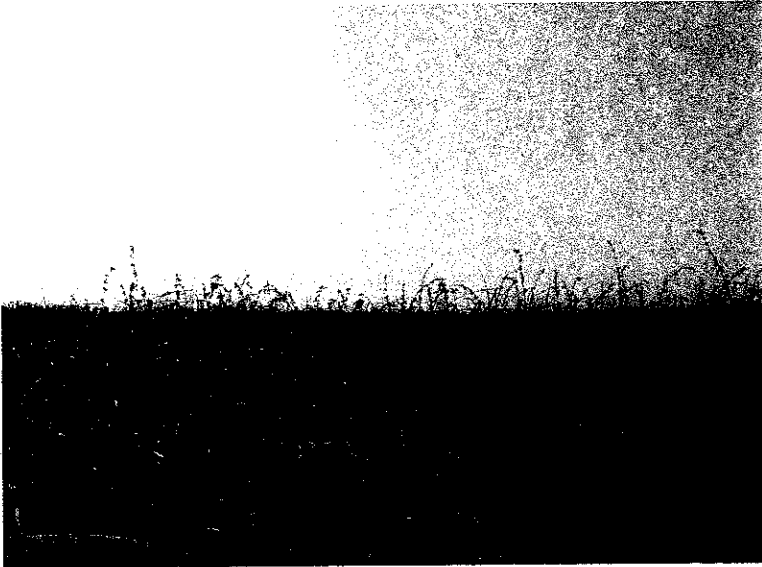
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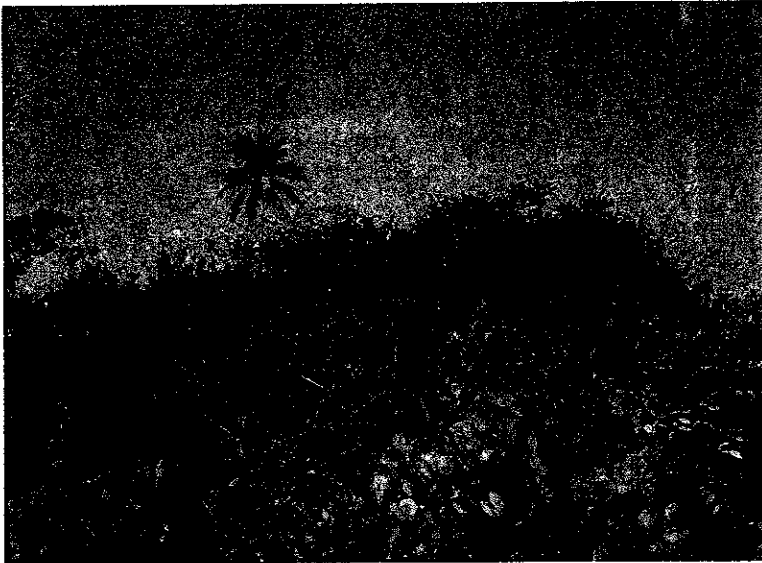
WETLAND DETERMINATION

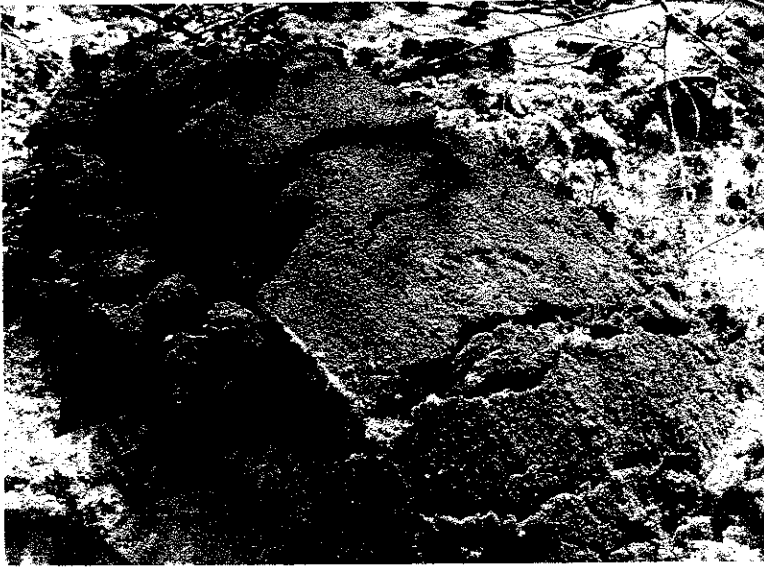
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Remarks	

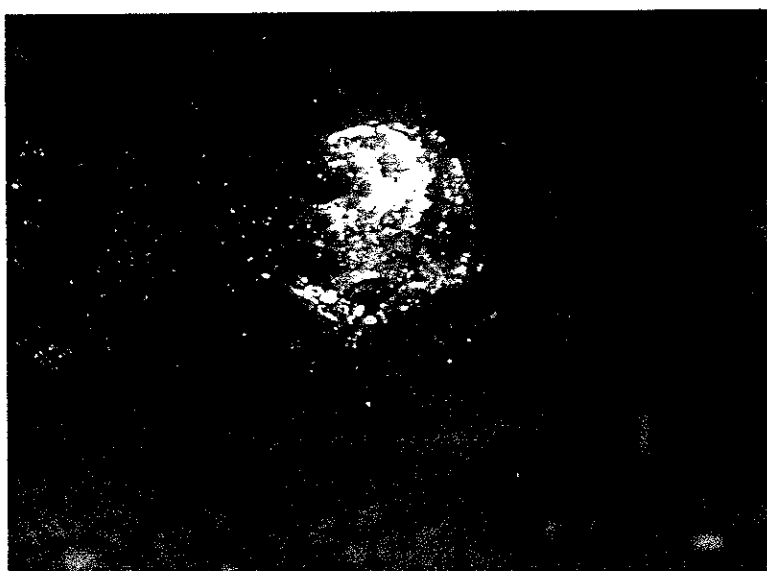
PHOTOS

Appendix B







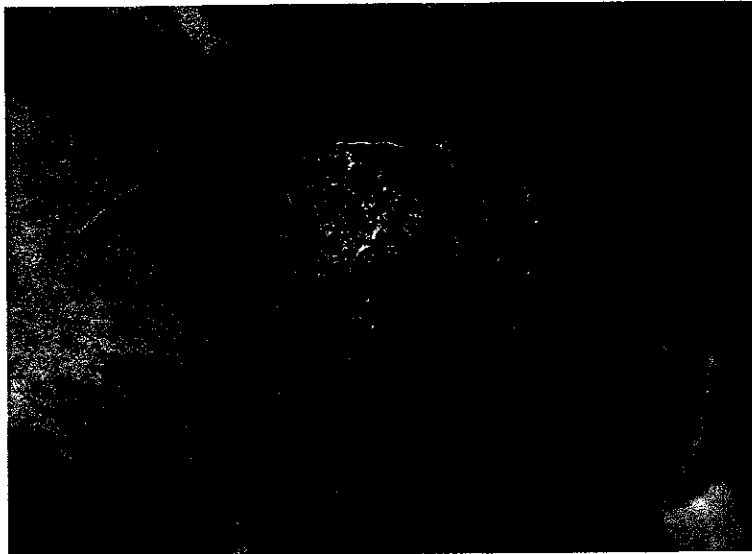








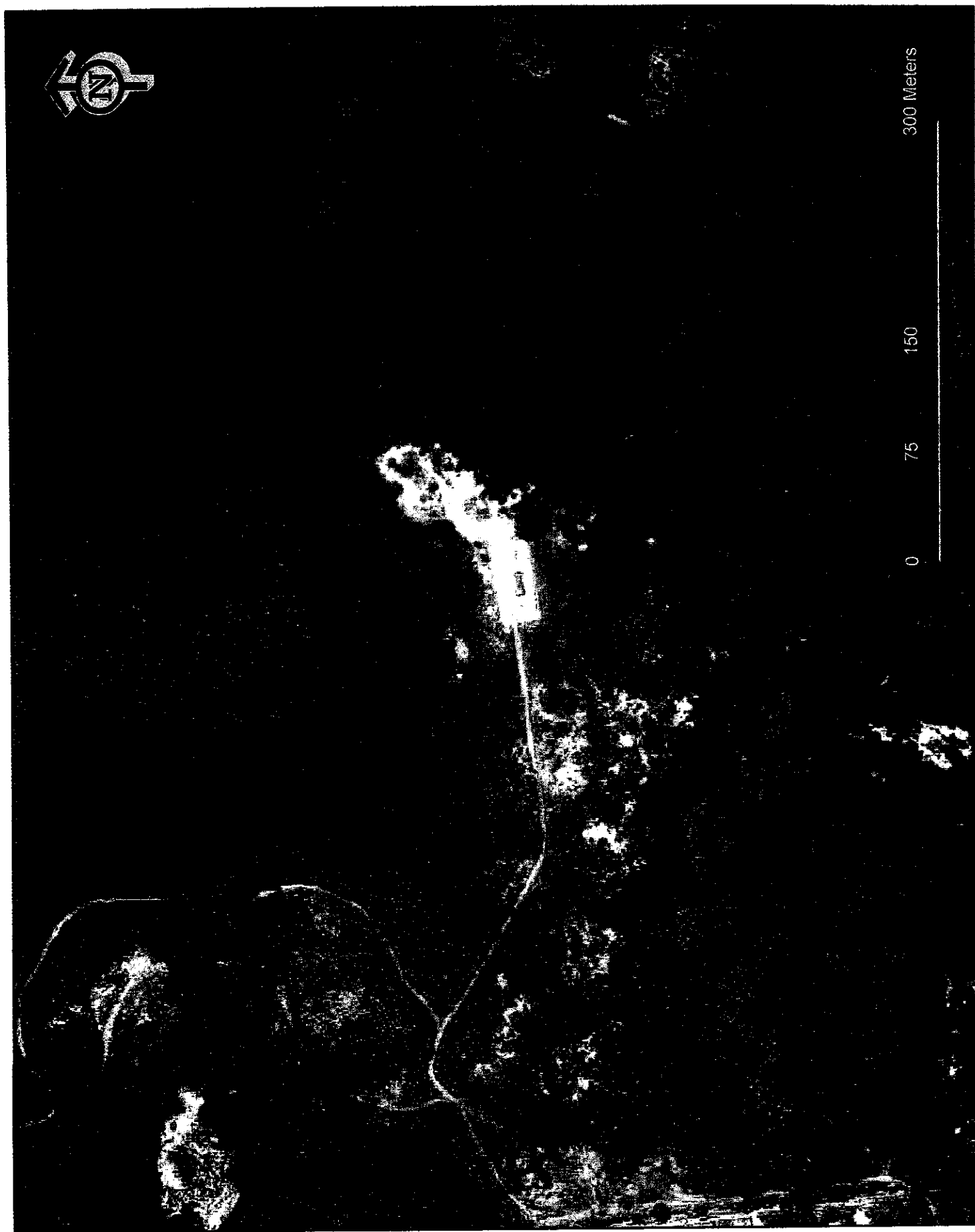


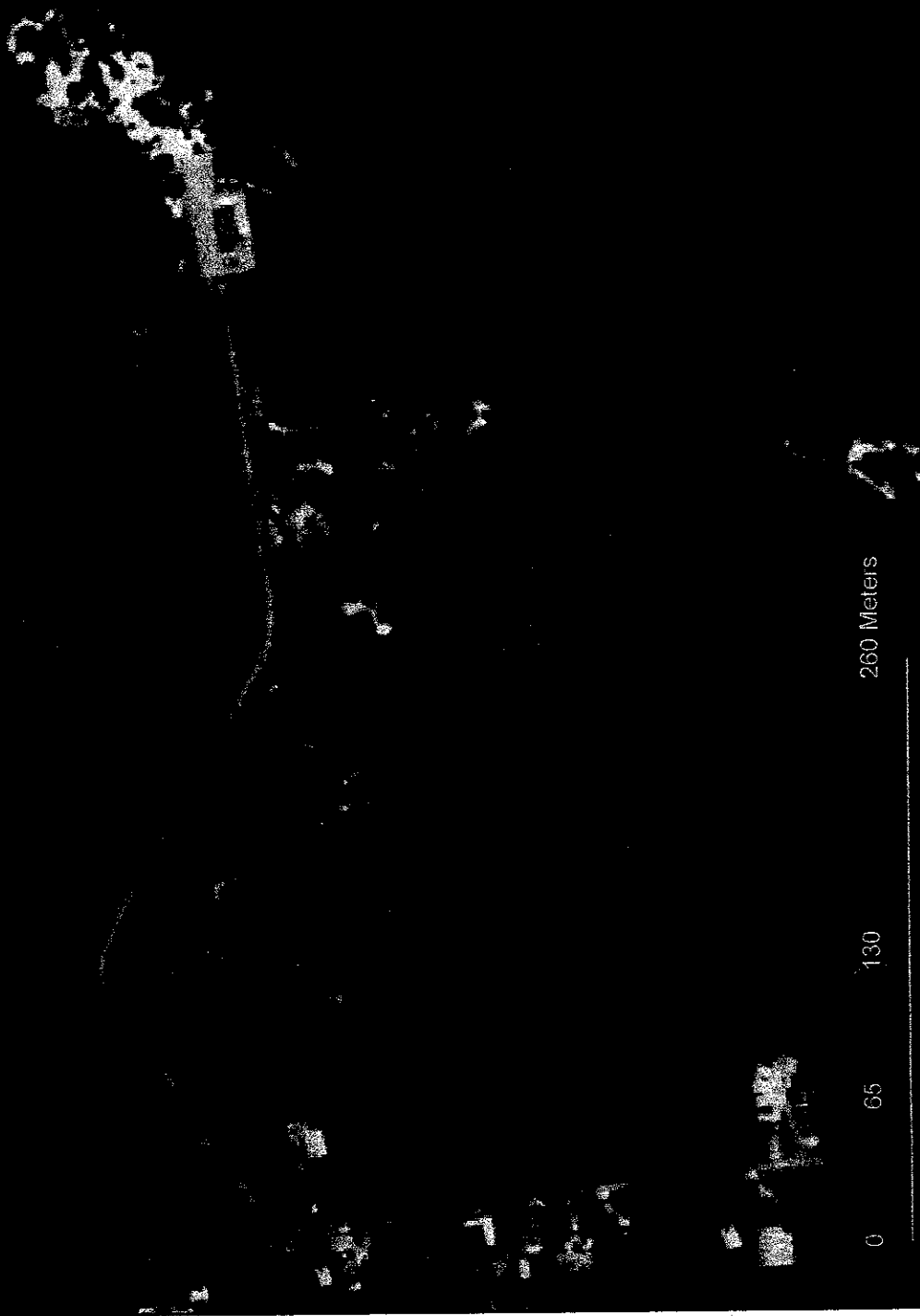


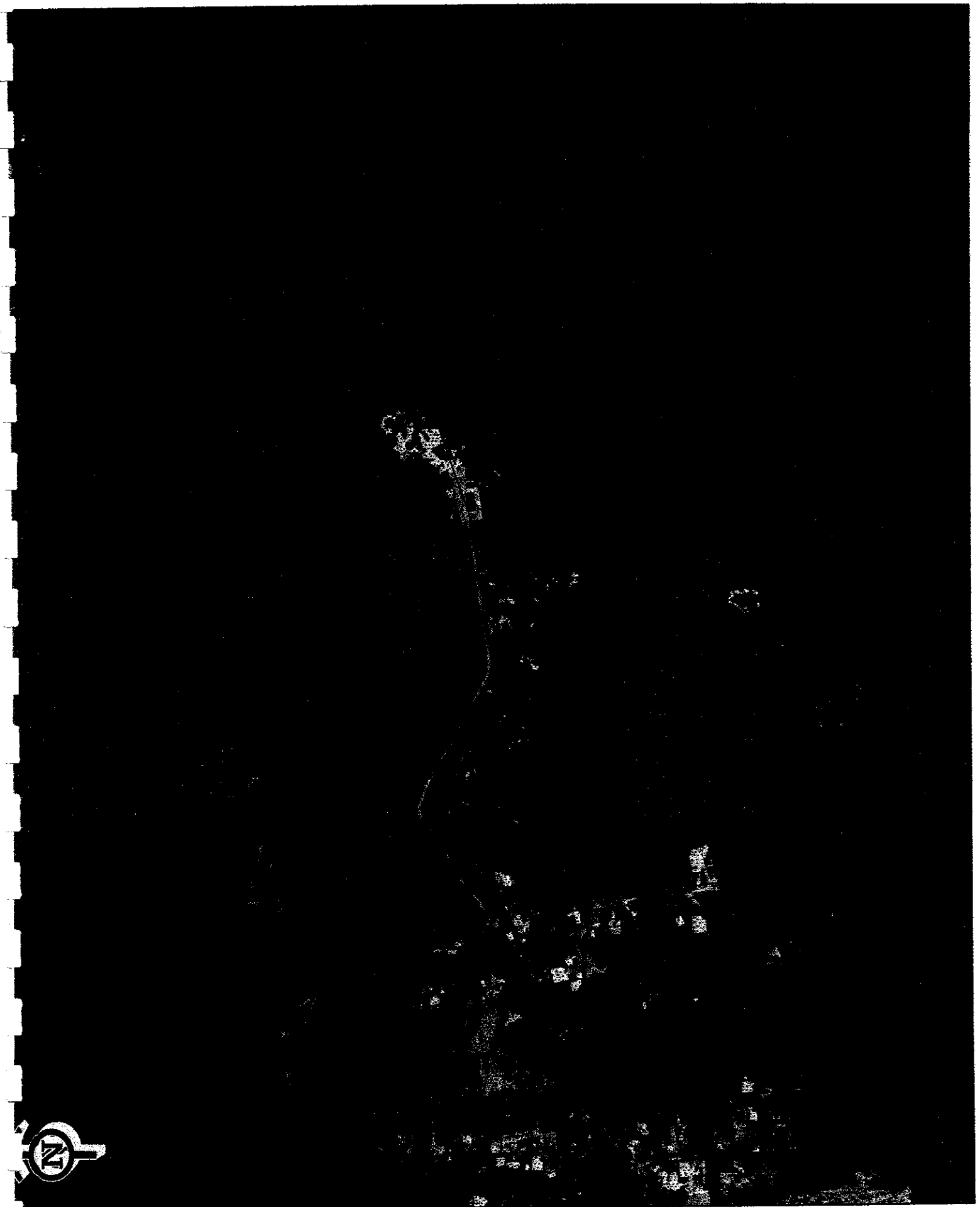
MAPS AND FIGURES

Appendix C













Tortuguero Special
Planning Area

ANISEIA MARTINICENSIS

SCLERIA GEORGIANA

SCLERIA TRIGLOMERATA

SCLERIA CILIATA

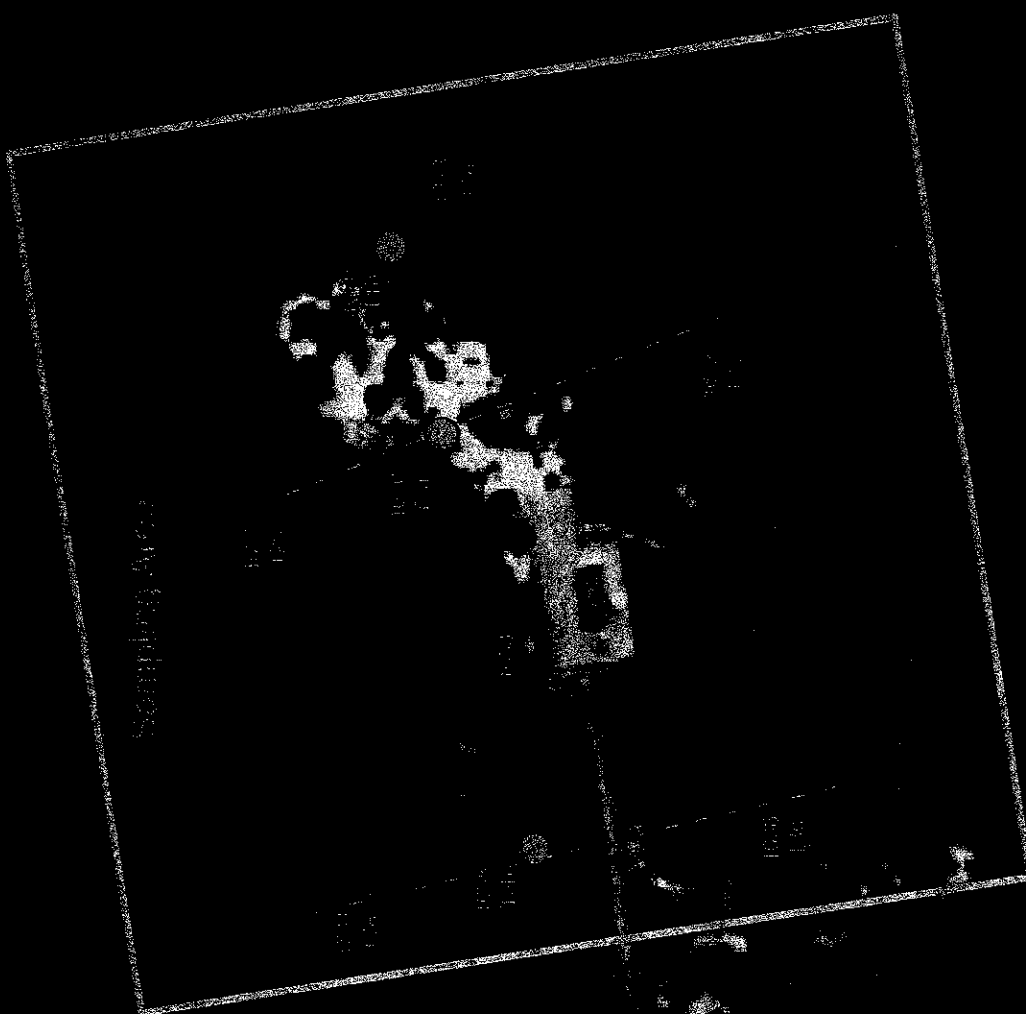
PORZANA FLAVIVENTER

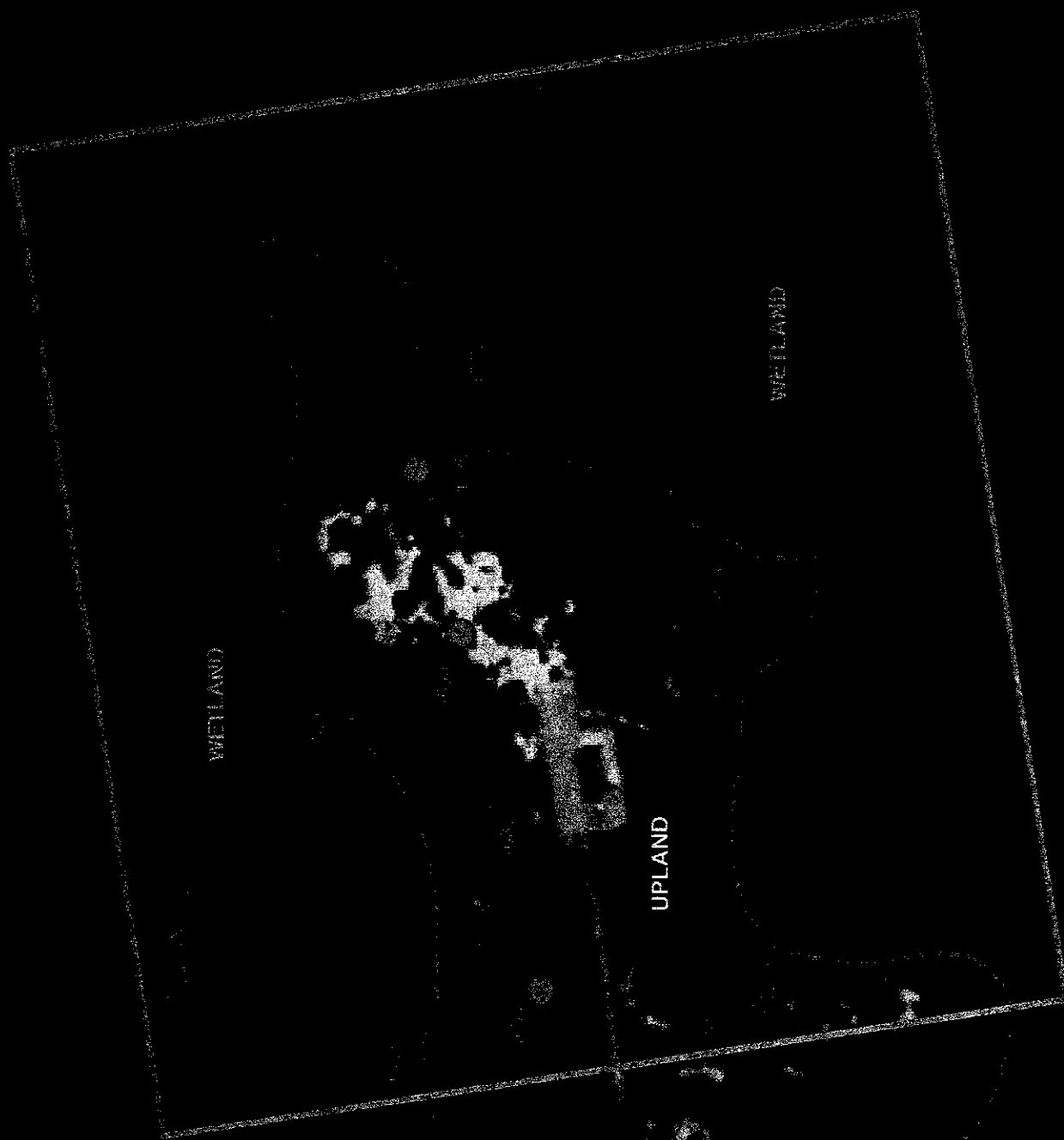
TACHYBAPTUS DOMINICUS

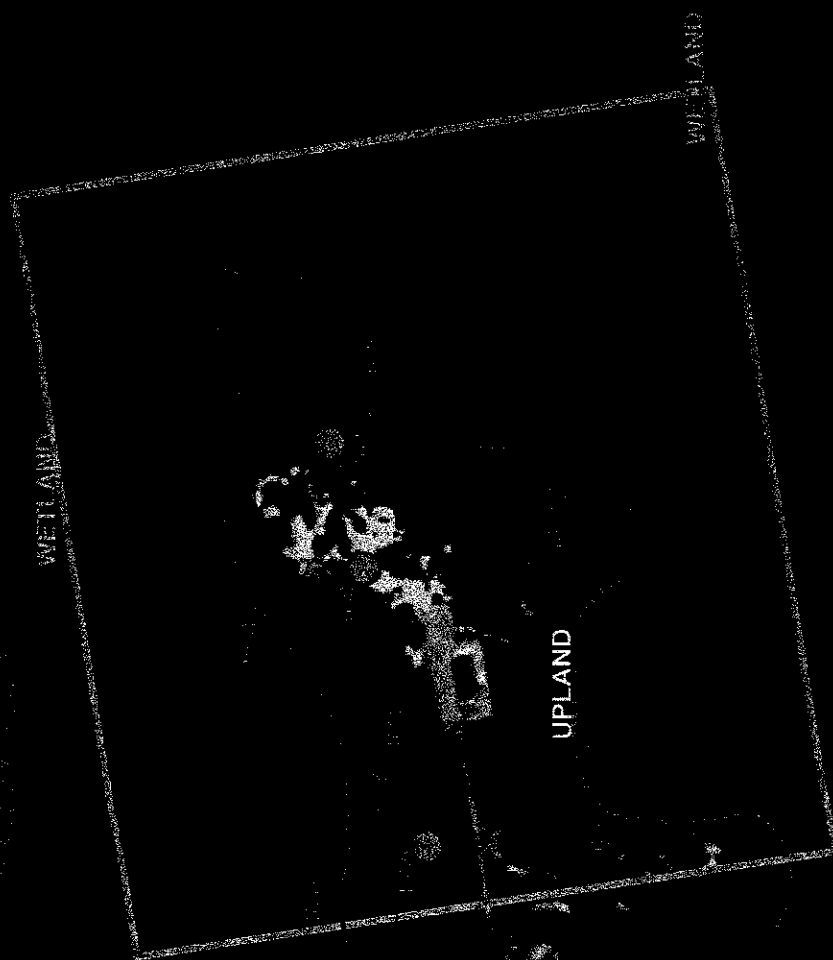
RHYNCHOSPORA OLIGANTHA

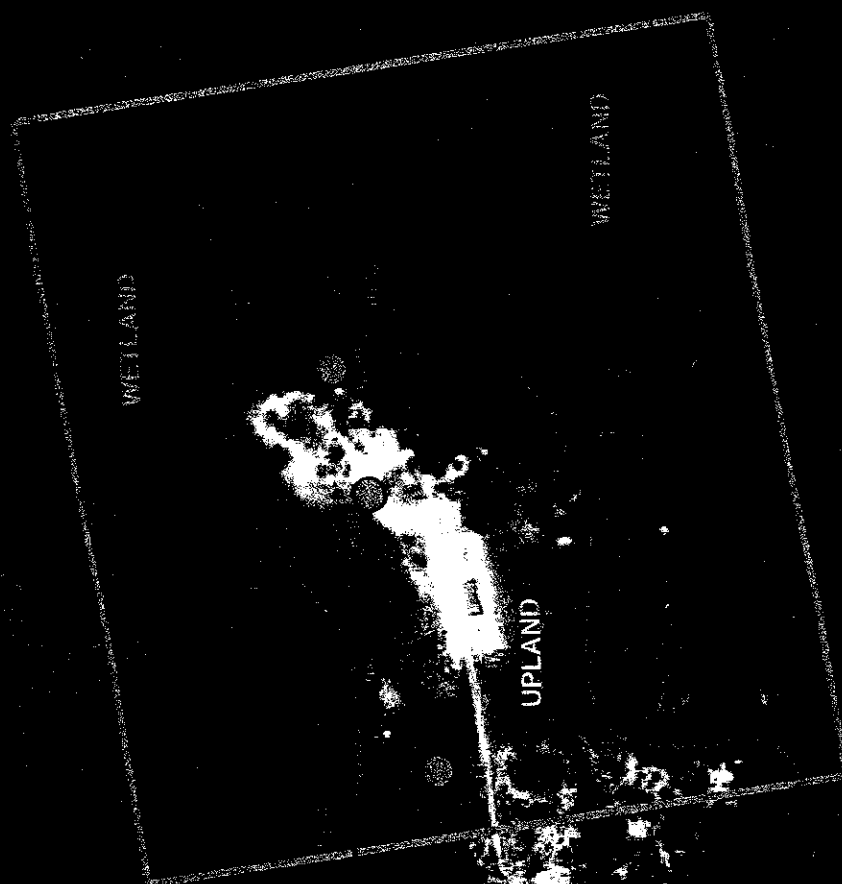
SCLERIA CILIATA

RHYNCHOSPORA PLUMOSA











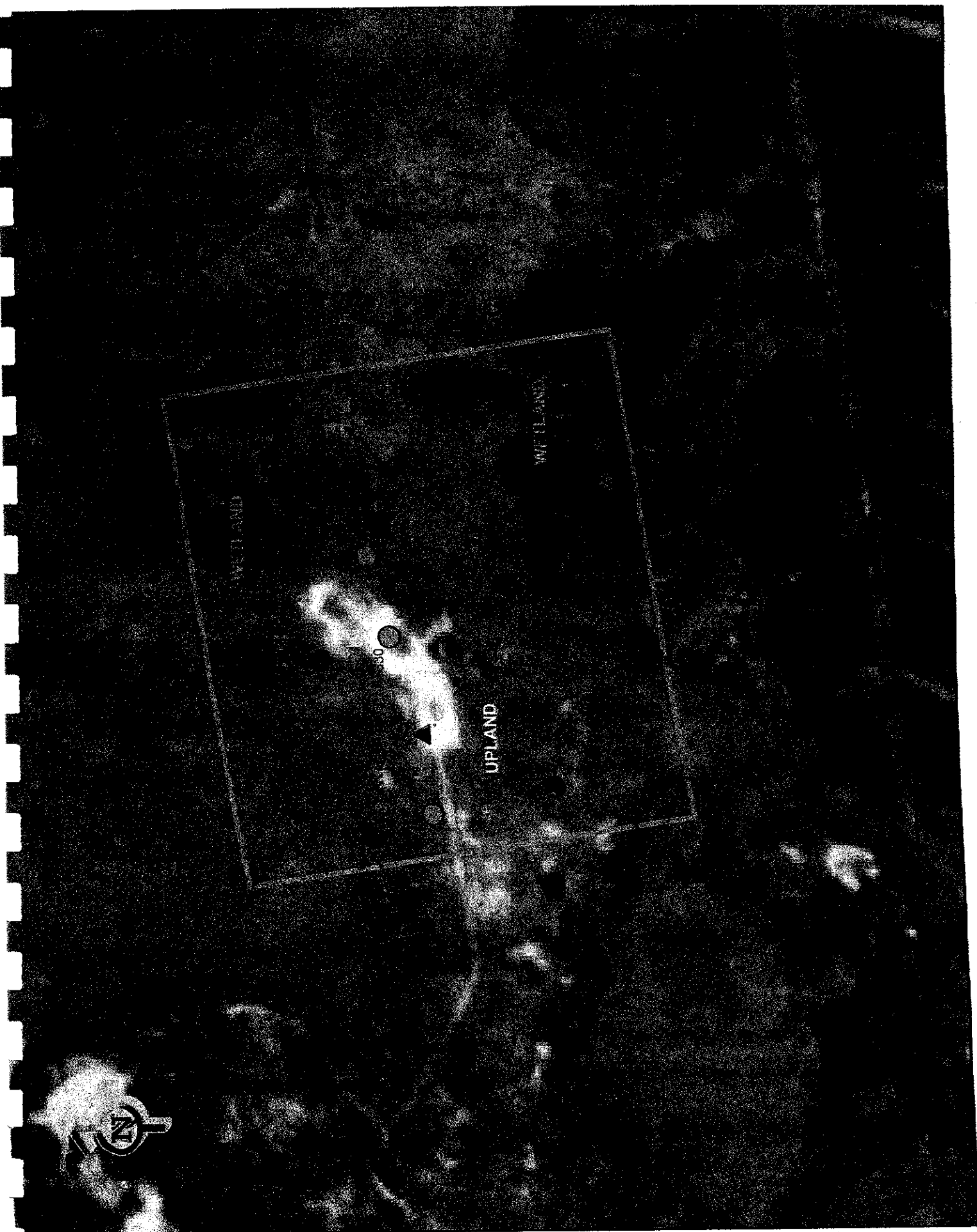




Figure 9c: JD Delineation Drawing 1982 Image
Jurisdictional Determination
FAA Homer Facility
Guarico, Ward,
Vega Baja, Puerto Rico



STUDY AREA

